

REMARKS

This Response is in reply to the Final Office Action mailed on July 12, 2004. Claims 19-32 are pending and claim 19 has been amended herein. Support for amendment to claim 19 is recited on pages 6, 7, 10, and shown on Figures 2A and 2B. No new matter has been added. Entry and consideration of the amendments and following remarks is respectfully requested.

Claim Rejections

Claims 19-27 and 29-32 were been rejected under 35 U.S.C. §103(a) as being unpatentable over Ulmanen (GB 2,349,688) in view of Paul (DE 25 51 078). This rejection is respectfully traversed.

The Applicants have amended claim 19 to include the subject matter of the turning damper supported by a joint and turned by an eccentric piece, and the turning damper enabling an induction ratio Q_2/Q_1 between flows L_1 and L_2 to be controlled preferably within a range of 2-6. Ulmanen and Paul do not teach these features. Accordingly, the Applicants assert that claim 19 is patentable over the cited prior art because none of the references teach these limitations.

Furthermore, Ulmanen represents a conventional device arrangement that does not include induction ratio control and over which the device of the present invention is a clear improvement. In the present invention, the induction ratio is means the mixing ratio between the flows L_2 and L_1 , i.e. how much the outgoing flow $L_1 + L_2$ contains L_1 and L_2 .

Regarding the reference of Paul, blades 21 do not exhibit a separate device arrangement intended for induction ratio control but, as is clear from the text on page 10, the double blades 21 form an adjustable control part, which double blades act together with flanges 90, 140 and wall parts 9 and 14 defining a mixing chamber 15 and affect the direction of the mixing air flowing out of a mixing chamber 15. Thus, the blade parts are not intended for induction ratio control, but instead, they are used for affecting the direction of air, as stated in the text of the Paul reference.

Applicants submit that there is absolutely no teaching or suggestion in Ulmanen that would lead one to combine the teachings of that reference with Paul. Paul does not mention having more than one chamber and therefore a person skilled the art would infer only a single chamber. Accordingly, absent some motivation, one of ordinary skill in the art would not combine the invention of Ulmanen with the teachings of Paul. Furthermore, Applicants submit that even if the two references were combined, the result would not be the present invention. Neither reference teaches a separate device arrangement intended for induction ratio control or that the turning damper enable an induction ratio Q_2/Q_1 between flows L_1 and L_2 to be controlled preferably within a range of 2-6.

Accordingly, Applicants assert that amended claim 19 is patentable over the cited prior art. Furthermore, since claims 20-32 depend from independent claim 19, and for the reasons stated above, these claims are allowable as well. It is therefore respectfully requested that the rejection of the claims under 35 U.S.C. §103(a) be withdrawn.

Claim 28 was rejected under 35 U.S.C. §103(a) as being unpatentable over Ulmanen (GB 2,349,688) in view of Paul (DE 25 51 078), and further in view of Chandler (3,823,870). The Applicants respectfully traverse this rejection.

With regard to Chandler, the arrangement does not comprise an induction ratio control device that would be formed of a turnable plate structure placed in a mixing chamber as specifically recited in the claims. Nor does it teach or suggest that the turning damper enables an induction ratio Q_2/Q_1 between flows L_1 and L_2 to be controlled preferably within a range of 2-6.

Accordingly, the Applicants assert that the present invention is patentable over the cited prior art. Claim 28 is also patentable by reason of its dependency on allowable independent claim 19. It is therefore respectfully requested that the rejection of claim 28 be withdrawn.

Conclusion

In view of the amendments to the claim 19 made herein and the arguments presented above, it is submitted that the Examiner's rejections have been overcome and should be withdrawn. The application should now be in condition for allowance.


The Applicants note that there is no indication that the drawings are acceptable. The Applicants respectfully request that the Examiner provide indication that the drawings are accepted by the Examiner in the next formal communication.

Should any changes to the claims and/or specification be deemed necessary to place the application in condition for allowance, the Examiner is respectfully requested to contact the undersigned to discuss the same.

It is believed that the submission of this Amendment is timely. In the event that any extensions and/or fees are required for the entry of this Amendment, the Commissioner is specifically authorized to charge such fee to Deposit Account No. 50-0518 in the name of Steinberg & Raskin, P.C.

An early and favorable action on the merits is earnestly solicited.

Respectfully submitted,
STEINBERG & RASKIN, P.C.

By: 
Dona C. Edwards
Reg. No. 42,507

Steinberg & Raskin, P.C.
1140 Avenue of the Americas
New York, New York 10036
(212) 768-3800